

MVG 19—TUSSOCK GRASSLANDS

- Tufted habit, usually dominated by particular genera such as *Astrebla*, *Austrodanthonia*, *Austrostipa*, *Dicanthium*, *Eragrostis*, *Poa*, *Themeda*, *Sorghum*, *Heteropogon*, *Ophiuros*, *Oryza*, *Eragrostis* and *Spinifex*.
- Support a large range of species, partly as a result of this geographical range and partly as a result of the variation in soils and site conditions.
- Ecologists working in these tussock grassland areas have been fascinated by the seasonal variations and distinct relationships with the underlying landform and soils.



Photo: M. Fagg

Temperate grassland near Cooma, NSW

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Facts and figures

Major Vegetation Group	MVG 19—Tussock Grasslands
Major Vegetation Subgroups (number of NVIS descriptions)	Mitchell grass (<i>Astrebla</i>) tussock grasslands (61) Blue grass (<i>Dicanthium</i>) and tall bunch grass (<i>Chrysopogon</i>) tussock grasslands (48) Temperate tussock grasslands (32) Other tussock grasslands (312)
Typical NVIS structural formations	Tussock grassland with wide range of covers and heights
Number of IBRA regions	66
Most extensive in IBRA region	Est. pre-1750 and present: Mitchell Grass Downs (Qld and NT)
Estimated pre-1750 extent (km²)	559 850
Present extent (km²)	525 888
Area protected (km²)	15 795



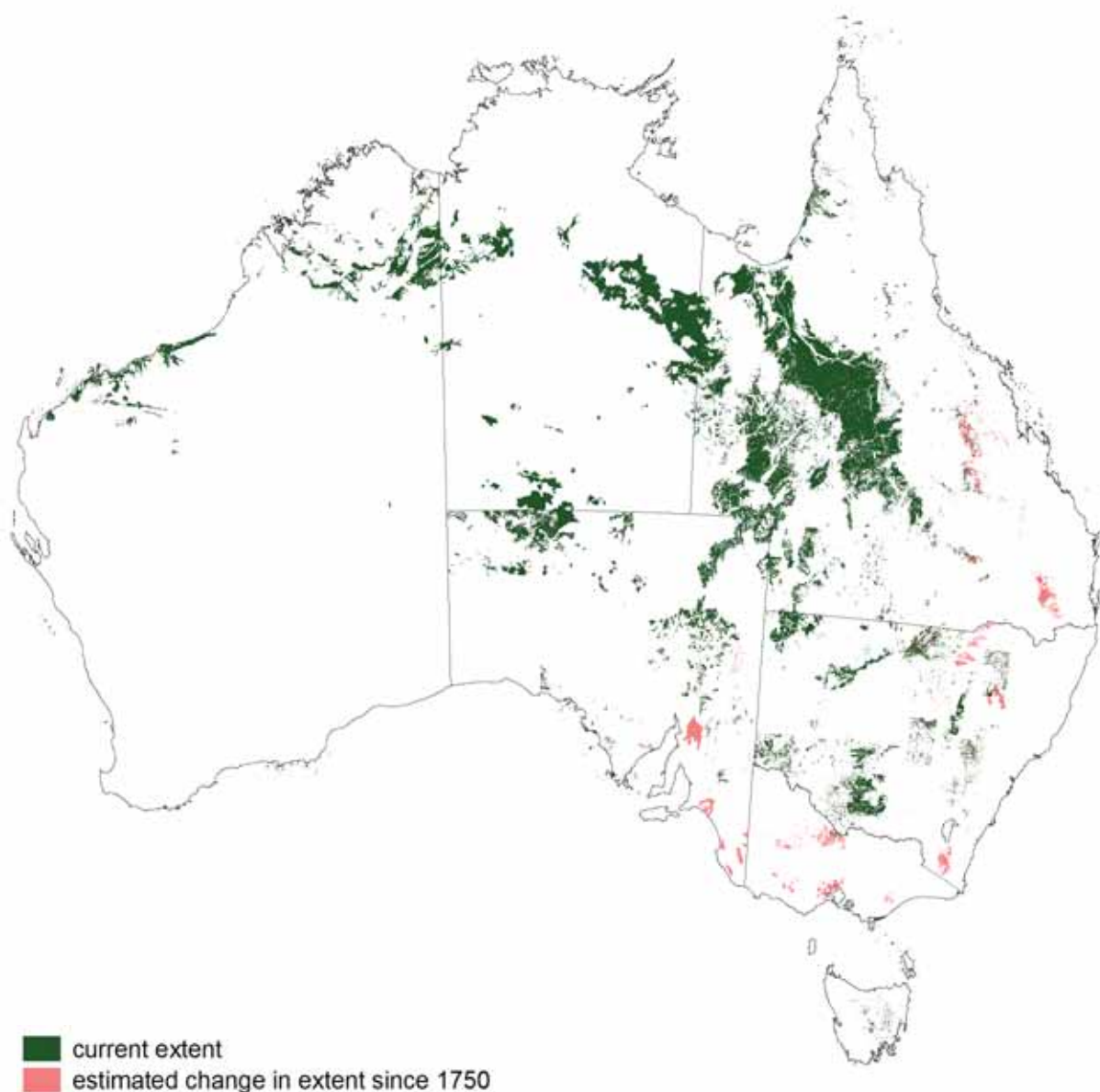
Photo: M. Fagg

Astrebla spp. (Mitchell grass) grassland, north of Cunnamulla, Qld

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Geography

- Extend from tropical to semi-arid and some temperate areas of Australia and include valuable areas for pastoralism (e.g. the Mitchell Grasslands). The major distributions occur in western Queensland, central Northern Territory and throughout South Australia.
- Largest area is in Queensland (268 013 km²).
- Position in the landscape is variable and includes, for example, tablelands and montane environments, floodplains and localised clay pans.



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Change

- Approximately 6% of the estimated pre-1750 extent cleared accounting for 3.3% of total clearing in Australia.
- Approximately 34 000 km² cleared since European settlement.
- Generally Tussock Grasslands have not been cleared but have been extensively grazed as many of the species are palatable to cattle and sheep when the growth is young and soft.
- Changes have generally been related to the effects of different fire regimes and the impacts of total grazing pressure, especially during drought. Fire regimes may affect the growth of tussocks and other annual and short-lived perennial grasses and a range of colonising invasive species may replace the dominant tussock grasses immediately after a fire.
- Threats include inappropriate fire regimes and total grazing pressure. On the islands of the North West Shelf localised grazing pressure from native marsupials on clay pans has been observed.

Tenure

The Tussock Grasslands occur across a range of tenures.

Australian Capital Territory:	leasehold, protected areas
New South Wales:	freehold land, leasehold land, protected areas
Northern Territory:	leasehold land, some freehold land, some protected areas
Queensland:	leasehold land, freehold land, some in protected areas
South Australia:	leasehold land, freehold land, protected areas
Tasmania:	freehold land, patches in protected areas
Victoria:	isolated small areas on freehold land and in protected areas
Western Australia:	leasehold land, some in protected areas, reserved crown land and water production

Key values

- Biodiversity including a variety of species and communities.
- Ecotourism including bushwalking and landscape features.
- Pastoralism producing a substantial proportion of Australia's rangelands output.

These Tussock Grasslands appear to attract tourists from a scenic landscape perspective. The growth of ecotourism has led to a greater awareness of the need to manage these systems to allow opportunity for ready access, and at the same time to protect the values that attract the tourists. The value of these grasslands for Indigenous communities has also been more widely recognised recently.

These grasslands provide shelter for a large variety of reptiles and small marsupials in Australia.

Management considerations

- Fire is used as a tool to replicate 'natural' conditions and foster biodiversity and production values.
- Weed control (e.g. aggressive weeds such as buffel grass and ruby dock).
- Feral animals and their pressure on native flora and fauna.
- Grazing pressure from domestic, feral and native animals and the management of grazing using tools such as climate forecasting to determine feed alerts and property management planning to protect sensitive land types from excessive grazing.

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References

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- Carter O., Murphy A.M. and Cheal D. (2003) *Natural Temperate Grassland*. Dept of Natural Resources & Environment (Vic.), <<http://www.environment.gov.au/biodiversity/publications/grasslands/index.html>>.
- Fox I.D., Neldner V.J., Wilson G.W., et al. (2001) *The Vegetation of the Australian Tropical Savannas*. Env. Prot. Agency, Qld and Tropical Savannas CRC, 2 map sheets and 1 legend, <<http://savanna.ntu.edu.au/information/index.html>>.
- National Land & Water Resources Audit (2001) *Australian Native Vegetation Assessment 2001*. National Land & Water Resources Audit, Canberra, 332pp.

Data sources

- Interim Biogeographic Regionalisation for Australia (IBRA), Version 6.1.
- Land Tenure in Australia's Rangelands (1955 to 2000), National Land and Water Resources Audit.
- National Vegetation Information System, Version 3.0.
- 1996/97 Land Use of Australia, Version 2.
- Collaborative Australian Protected Areas Database—CAPAD 2004—Terrestrial.
- Species Profile and Threats (SPRAT) database Australian Government Department of the Environment and Water Resources, <<http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>>.

Notes

- Further areas of this group have been identified in New South Wales and South Australia from new state data supplied to NVIS.
- See the [Introduction to the MVG fact sheets](#) for further background on this series.



Ehrenberg Range, WA

Photo: M. Fagg